



# Sand & Gravel General Permit



NPDES and State Waste Discharge General Permit  
for  
Process Water, Stormwater, and Mine Dewatering Water  
Associated with  
Sand and Gravel Operations, Rock Quarries, and Similar Mining  
Facilities, Including Stockpiles of Mined Materials, Concrete  
Batch Operations and Hot Mix Asphalt Operations



# Sand and Gravel General Permit

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- Timber Tracts (sand and gravel point source activities)
- Logging (sand and gravel point source activities)
- Dimension Stone
- Crushed and Broken Limestone
- Crushed and Broken Granite
- Crushed and Broken Stone, Not Elsewhere Classified
- Construction Sand and Gravel
- Industrial Sand
- Kaolin and Ball Clay
- Clay, Ceramic, and Refractory Minerals, Not Otherwise Classified
- Miscellaneous Nonmetallic Minerals, Except Fuels
- Asphalt Paving Mixtures and Blocks
- Ready-Mixed Concrete



# Sand and Gravel General Permit

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- NPDES & State Waste Discharge Permit
  - Authorizes discharges to surface water and ground water
  - Stormwater
  - Process water
  - Mine dewatering water



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# Sand and Gravel General Permit

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- 3<sup>rd</sup> iteration of general permit
  - First permit issued in 1994
  - Second permit issued in 1999
    - Expires August 6, 2004
  
- 937 facilities covered under permit
  - 20% discharge to surface water
  - 80% discharge to ground water



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# Sand and Gravel General Permit

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- Discharge Limitations
  - Numerical effluent limitations
- Monitoring
  - Sampling and Analysis
  - Inspections
  - Visual monitoring
- Reporting and Recordkeeping
  - Quarterly DMRs
  - Noncompliance notification



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## Stormwater limits: discharge to surface waters

Parameter	Average Monthly	Maximum Daily
Turbidity	50 NTU	50 NTU
	Daily Discharge Limits	
	Minimum	Maximum
pH	6.0	9.0

# Sand and Gravel General Permit

- Timber Tracts/Logging,
- Crushed Limestone/Granite/Stone,
- Construction Sand and Gravel, and
- Ready Mixed Concrete

**Process Water/Mine Dewatering → Surface Water**

Parameter	Average Monthly	Maximum Daily
TSS	40 mg/liter	80 mg/liter
Turbidity	50 NTU	50 NTU
	<b>Daily Discharge Limits</b>	
	<b>Minimum</b>	<b>Maximum</b>
pH	6.0	9.0

# Sand and Gravel General Permit

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Asphalt plants not allowed to discharge  
process water to surface waters  
(40 CFR Part 443, Subpart B)





# Sand and Gravel General Permit

## Industrial Sand Facilities

### Process Water/Mine Dewatering → Surface Water

Process/Mine Dewatering Water	Surface Water Discharge Limits	
	Average Monthly	Maximum Daily
TSS	25 mg/liter	45 mg/liter
Turbidity	50 NTU	50 NTU
	Daily Discharge Limits	
	Minimum	Maximum
pH	6.0	9.0

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## Impaired Waters

### ■ Parameters of Concern:

- Turbidity
- Fine Sediment
- pH
- Temperature

### ■ Direct discharges



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## Impaired Waters

- Comply with completed TMDLs
  - If completed prior to effective date of permit
- If TMDL not completed,
  - Effluent Limit = WQ Standards
    - pH: 6.5 – 8.5
    - Turbidity/Sediment: 5 NTU over background
    - Temperature: 18°C



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## Impaired Waters

- Compliance schedule - existing facilities
  - Monitoring/Reporting
  - Goal: Characterize effect of discharge on receiving water temperature



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## Ground Water Limitations – All Facilities

<ul style="list-style-type: none"><li>• Process Water</li><li>• Mine Dewatering Water</li><li>• Stormwater</li></ul>	Daily Discharge Limits	
	Minimum	Maximum
pH	6.5	8.5



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## Monitoring – Surface Water Discharges

Category	Parameter	Frequency
•Process water •Dewatering water •Stormwater	Turbidity	Two times a month
	pH	Monthly
	Temperature	Weekly (summer)
• Process water • Dewatering water	TSS	Quarterly
•Process Water (Concrete Producers)	TDS	Monthly

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## Monitoring – Ground Water Discharges

Category	Parameter	Frequency
• Stormwater	pH	Quarterly
• Process water	pH	Monthly
• Process Water*	TDS	Monthly

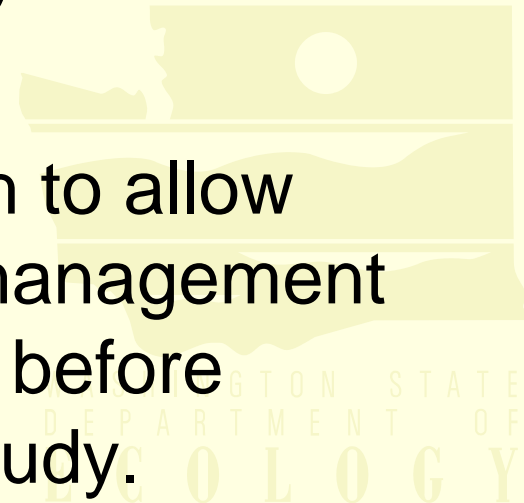
\*Concrete plants only, asphalt plants dropped

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## **Concrete/Asphalt Plants – that discharge process water to ground**

- Previous permit had provisions to require facilities that typically exceed 500 mg/l TDS to conduct ground water impact study.
- Draft permit modifies this approach to allow operators to implement adaptive management schedule to address TDS problem before conducting ground water impact study.





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## Reporting

- Discharge Monitoring Reports (DMRs)
  - Quarterly
  - DMR deadline changed from 15 to 30 days after the end of the monitoring period



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## Permit Renewal Schedule

July 7	Public Notice of Draft
Aug 10-12	Hearings/Workshops
Aug 13	End Public Comment Period
Sept 15	Issue Permit
Oct 14	Effective



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